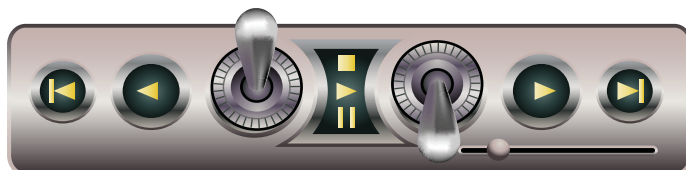


Flight Surgeon Refresher Course

Section 5: Aeromedical Fitness

US Army Aeromedical References
(FSRC501)



US ARMY AEROMEDICAL REFERENCES

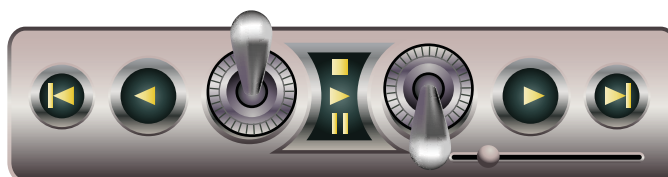
Introduction

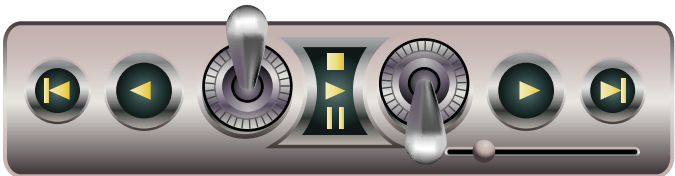
As a FS/APA, you will have to make recommendations to the local unit commander on the aeromedical fitness of aircrew members. You will need to know the aeromedical evaluation requirements and standards in order to make these decisions. If aircrew members do not meet aeromedical standards, you need to know the aeromedical implications of these conditions, if these conditions can be waived, and the information required to request waivers as well as the follow-up requirements if a waiver is granted.

This lesson discusses the aeromedical clinical references that provide current guidance for aeromedical fitness recommendations. These references have been developed and updated by senior aeromedical personnel at the US Army Aeromedical Proponency Directorate (USAAPD) with final approval through the Office of the US Army Surgeon General for the Army Regulations (ARs) through the consultant for Aviation Medicine. Website locations are provided for you to obtain the most current versions of these references. We recommend that you make a personnel electronic download aeromedical reference library on your computer's hard drive along with a portable backup for ready reference.

Objectives:

- a. Describe the applicability of AR 40-501 to aeromedical administration and physical standards for aviation.
- b. Discuss the temporary flying restrictions due to exogenous factors as outlined in AR 40-8.
- c. Describe the role of the Aeromedical Technical Bulletins (ATBs).
- d. Describe the role and elements of Aeromedical Policy Letters (APLs)





What are the pertinent aeromedical references?

The conduct of flight physicals and the physical standards for aviation are governed by AR 40-501. Policies and procedures are amplified in the Aeromedical Policy Letters (APLs) and Aeromedical Technical Bulletins (ATBs). A thorough understanding of all these references is critical for an effective aeromedical decision making process.

Army Regulation 40-501 (AR 40-501), Standards of Medical Fitness

- This regulation covers medical standards for all Army personnel. A FS/APA should be familiar with all of the content. However, as a FS/APA, you will be considered the subject matter expert for the most “aeromedical” chapters 4 and 6.
- The US Army Publishing Directorate is responsible for maintaining and updating the approved published versions of all Army publications on their website.
- Chapters 4 and 6 of this regulation have been developed by US Army Aeromedical Proponency Directorate (USAAPD) and staffed through the Aviation Medicine Consultant to the OTSG; however, the OTSG retains final approval authority.
- These chapters apply to any aircrew member performing aviation duties in DA aircraft or aircraft leased by the DA, and for ATCs working in Army ATC facilities.

Ch.4, Medical Fitness Standards for Flying Duty:

- Lists medical conditions and physical defects that are causes for rejection in selection, training, and retention for aviation duties
- A failure to meet medical standards for flying duties remains disqualifying until reviewed by the appropriate Aviation Medicine Approving Authority

Ch.6, Aeromedical Administration:

- Lists administrative policies for completing the Army Flying Duty Medical Exam (FDME), Aeromedical Summaries (AMS), and DA Form 4186 (Medical Recommendation for Flying Duty)
- States the procedure for the review and disposition of aeromedically qualified and disqualified aircrew and ATCs.

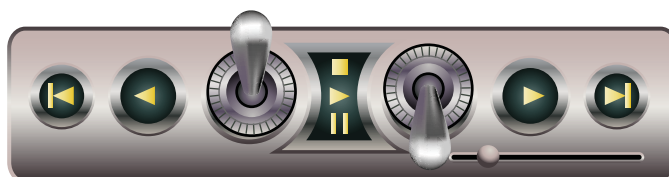
AR 40-8, Temporary Flying Restrictions Due to Exogenous Factors

- This regulation has been developed by USAA-PD and staffed through the Aviation Medicine Consultant to the OTSG; however, the OTSG retains final approval authority.
- This regulation covers flight restrictions due to “exogenous factors.” These are activities that can have considerable effects on aircrew in the aviation environment, which would normally have negligible effects on the body but do not require long term “grounding.”
- Temporary flight restrictions under AR 40-8 do NOT require the use of the DA 4186 as a “downslip.”

Where to find it: ARs and DA Forms

Find approved versions of all Army publications on the US Army Publishing Directorate website by entering the website's address into your web browser's window:

<http://www.usapa.army.mil>



- The following are the exogenous factors that require temporary flight restriction specified in AR 40-8:
 - Administration of drugs
 - Immunizations
 - Blood donation
 - Decompression experience
 - SCUBA diving
 - Tobacco smoking
 - Strenuous sporting activities
 - Corrective lenses to provide 20/20 or better, near and far vision bilaterally

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Note: This regulation is currently being updated; keep an eye for this long overdue update. Aeromedical Policy Letters (APLs) have been developed for permanently disqualifying conditions and to clarify or modify policy on some temporary conditions (e.g. medications, specific immunizations, decompression sickness, smoking cessation, etc.).

Aeromedical Technical Bulletins (ATBs):

- These bulletins have been developed by USAAMA and staffed through the Aeromedical Consultants Advisory Panel (ACAP) and the Aviation Medicine Consultant to the OTSG.
- This collection of bulletins standardizes “how to” correctly perform testing or tasks specific to the aviation medicine program.
- The first of these, the “Administrative Guide” consolidates the essential aeromedical elements of the ARs, APLs and ATBs and provides guidance on how to conduct and apply aeromedical evaluations and dispositions. It contains convenient charts of required tests and associated aeromedical standards, explains the intent of regulations and policies, describes how to accurately complete FDMEs, Aeromedical Summaries and DA 4186s, and establishes the processes for making aeromedical dispositions.

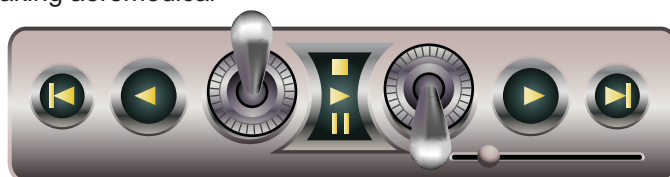
- Other ATBs currently available describe how to do optometric exams and aviation specific exams as listed below.
 - **Valsalva Testing**
 - **Anthropometric Testing**
 - **Reading Aloud Testing**
 - **Aeronautical Adaptability (“AA”; formerly referred to as “ARMA”)**
 - **Aeromedical Graded Exercise Test (AGXT)**
 - **Optometric Exams**
 - **Distant Visual Acuity Testing**
 - **Near Visual Acuity Testing**
 - **Cycloplegic Refraction Testing**
 - **Subjective/Manifest Refraction Testing**
 - **Ocular Motility Testing**
 - **Color Vision Testing**
 - **Depth Perception Testing**
 - **Field of Vision Testing**
 - **Night Vision Testing**
 - **Completing DA Form 4186**
 - **Aeromedical Summaries (AMS)**

Where to find it: APLs and ATBs

As the US Army Aeromedical Activity (USAAMA) updates, creates or deletes APLs or ATBs, they post them on their website. It is important that you visit this site frequently to remain current in your aeromedical practices.

Find current approved versions of ATBs on the United States Army School of Aviation Medicine (USASAM) website by clicking on the link below or entering the website's address:

http://usasam.amedd.army.mil/_aama/links.htm



Aeromedical Policy Letters (APLs)

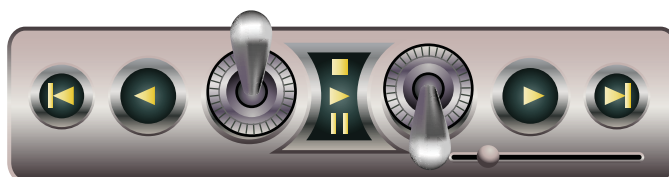
- These policy letters have been developed by USAAMA and staffed through the ACAP and Aviation Medicine Consultant to the OTSG.
- Army Policy letters are guidelines, interpretations and elaborations on the physical standards listed in AR 40-501, which were developed to standardize evaluation, treatment, disposition, and the waiver process for aircrew Army-wide.

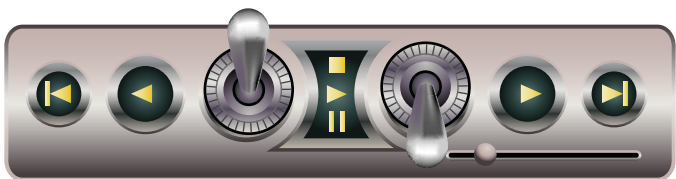
APL Categories

Specific aeromedical policy and discussion can be found on the most commonly used and recently updated APLs in lesson FSRC505. As you encounter questions on specific medical conditions, refer to the corresponding APL to review the Aeromedical Considerations, Waiver Policy, Information Required, Follow Up and Treatment Policy, and pertinent clinical discussion on each condition.

The APLs are organized by physiological system as listed below:

- Cardiovascular
- Dermatology
- Endocrinology
- Gastroenterology
- Hematology
- Infectious Diseases
- Malignancy
- Medication
- Miscellaneous
- Neurology
- Obstetrics & Gynecology
- Ophthalmology
- Orthopedic
- Otorhinolaryngology
- Psychiatric
- Pulmonary Disease
- Urology





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